# CHAPTER 4000 PLANNING

# **Chapter 4000 Table of Contents**

4000	PLANNING	.4-5		
4100 4110	Planning Section Organization Planning Section Planning Cycle Guide			
4200 4210 4220	Roles and Responsibilities	.4-7		
4230	Resource Unit			
4240	Technical Specialists			
4250	Documentation Unit			
4260	Demobilization Unit			
4270	Environmental Unit			
4300	Compliance Guidance	.4-9		
4310	Statutory Guidance - Federal	.4-9		
4311	Comprehensive Environmental Response Compensation and Liability Act., 1990 (CERCLA)	.4-9		
4312	Federal Water Pollution Control Act(FWPCA) as amended by Clean			
4313	Water Act(CWA) & Oil Pollution Act 1990 (OPA 90)  National Historic Preservation Act (NHPA)			
4314	Endangered Species Act (ESA)			
4315	Resource Conservation and Recovery Act (RCRA)			
4316	National Environmental Policy Act (NEPA)			
4320	National Responsible Party Policy			
4330	State and Local Compliance Guidance			
4331	Responsible Party			
4332	Washington			
4333	Oregon	. 4-13		
4334	Idaho	. 4-14		
4335	Prevention Laws	4-14		
	1 Washington			
4335.	1.1 Washington Prevention Requirements	. 4-14		
	1.2 Vessel Traffic System in Puget Sound			
4335.	2 Oregon	. 4-15		
	2.1 Pilotage in Portland Area			
	Local Government Requirements			
4336.1 Washington				
	Disposal Guidelines			
4337.	1 Washington	.4-1/		

4337.2 Oregon	4-17
4337.2.1 Classification & Segregation	4-17
4337.2.2 Reuse/Recycle	
4337.2.3 Incineration	
4337.2.4 On-site Burning	4-18
4337.2.5 Landfills	
4337.2.6 Interim Storage	4-19
4337.2.7 Transportation	
4337.3 Idaho	
4338 Volunteer Management Policy	
4338.1 Washington	
4338.2 Oregon	
4338.3 Idaho	
	— .
4400 Environmental Sensitivity Indices, Maps & Information – Geographic	
Response Plans (GRPs)	4-21
4410 Puget Sound, Washington COTP Area of Responsibility	
4420 Environmental Protection Agency Area of Responsibility	
4430 Portland, Oregon COTP Area of Responsibility	
,	
4500 General Response Priorities	4-21
4510 General Hierarchy of Response Priorities	
To To Tonicial Findianon, or Prospenies Findingsomming	
4600 Strategic Response Options	4-22
4610 Sensitive Areas	
4620 Dispersants	
4621 Dispersant Use Policy	
4621.1Washington	
4621.2 Oregon	
4622 Dispersant Use Checklist	
4630 In-Situ Burning	
4631 In-Situ Burning Policy	
4001 III Old Barriing I olioy	+ 01
4632 Authorization Proceedures	4-31
4632.1 Exposure Limits for Emissions	
4632.2 Preapproval	
4632.3 Case - by - Case	
4632.4 Not Allowed	
4632.5 Monitoring4640 Decanting	4-40 4 40
4641 Decanting Policy	
<b>0</b> ,	
4641.1Criteria	
4650 Bioremediation	4-44
4700 Becarved for Euture Hea	A A.F.
4700 Reserved for Future Use	4-45
4900 Becaming for Future Lies	4 45
4800 Reserved for Future Use	4-45

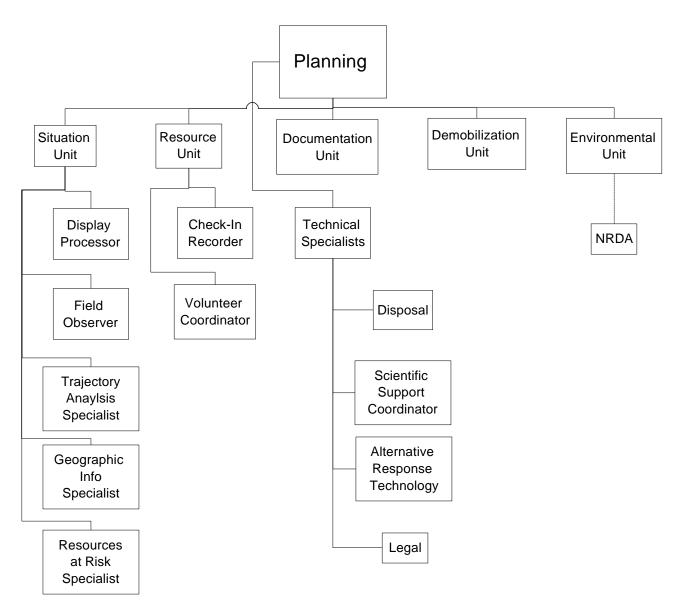
4900 Reserved for Future Use .......4-45

#### 4000 PLANNING

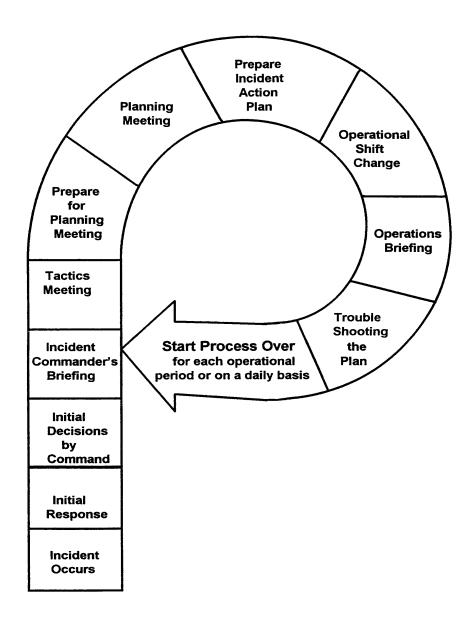
# 4100 Planning Section Organization

The following is an organizational chart of the Planning Section and its subordinate units. It serves as an example and is not meant to be all inclusive. The functions of the Planning Section must be accomplished during an incident, however, they can be performed by one individual or can be expanded, as needed, into additional organizational units with appropriate delegation of authority.

Information regarding the Planning Section and Staff positions within the command can be found in the Oil Spill Field Operations Guide (FOG) ICS-OS-420-1 dated June 1996.



# 4110 Planning Section Planning Cycle Guide



#### 4200 Roles and Responsibilities

The Planning Section is responsible for the collection and evaluation of incident situation information, preparing situation status reports, displaying situation information, maintaining status of resources, developing an Incident Action Plan, and preparing required incident related documentation. This is done under the direction of the Planning Section Chief. All functions not assigned by the Section Chief remain the responsibility of the Section Chief.

#### **4210 Planning Section Chief Responsibilities**

The Planning Section Chief, a member of the General Staff, is responsible for the collection, evaluation, dissemination and use of information about the development of the incident and status of resources. Information is needed to 1) understand the current situation, 2) predict probable course of incident events, and 3) prepare alternative strategies for the incident.

#### **4220 Situation Unit**

The Situation Unit is responsible for the collection, command post display, and evaluation of information about the current and possible future status of the spill and the spill response operations. This responsibility includes the compilation of information regarding the type and amount of oil spilled, the amount of oil recovered, the oil's current location and anticipated trajectory, and impacts on natural resources. This responsibility includes providing information to the GIS Specialist(s) for the creation of maps to depict the current and possible future situation and the preparation of reports for the Planning Section Chief.

#### 4230 Resource Unit

The Resource Unit (RESTAT) is responsible for maintaining the status of all resources (primary and support) at an incident. RESTAT achieves this through development and maintenance of a master list of all resources, including checkin, status, current location, etc. This unit is also responsible for preparing parts of the Incident Action Plan (ICS forms 203, 204 & 207) and compiling the entire plan in conjunction with other members of the ICS, (e.g., Situation Unit, Operations, Logistics) and determines the availability of resources.

#### 4240 Technical Specialists

Technical Specialist are advisors with special skills needed to support the incident. Technical Specialists may be assigned anywhere in the ICS organization. If necessary, Technical Specialists may be formed into a separate unit. The Planning Section will maintain a list of available specialists and will assign them where needed.

#### **4250 Documentation Unit**

The Documentation Unit is responsible for the maintenance of accurate, up-to-date incident files. Examples of incident documentation include: Incident Action Plans, incident reports, communication logs, injury claims, situation status reports, etc. Thorough documentation is critical to post-incident analysis. Some of these documents may originate in other sections. This unit shall ensure each section is maintaining and providing appropriate documents. Incident files will be stored for legal, analytical, and historical purposes. The Documentation Unit also provides duplication and copying services.

#### 4260 Demobilization Unit

The Demobilization Unit is responsible for developing the Incident Demobilization Plan, and assisting Sections/Units in ensuring that an orderly, safe, and cost effective demobilization of personnel and equipment is accomplished from the incident. Duties of the Demobilization Unit Leader are described in the Oil Spill Field Operations Guide (FOG) ICS-OS-420-1 dated June 1996.

#### **4270 Environmental Unit**

Other than protecting human life and safety, reducing impacts to public, natural and cultural resources represents the key motive in responding to an oil spill. The Environmental Unit is the central point within the Planning Section for determining how to best protect those resources. Specifically, the Environmental Unit is responsible for:

- Identifying all sensitive public natural and cultural resources likely to be affected by the spill, and set priorities for protecting these resources.
- Guiding the implementation of Geographic Response Plans (GRPs).
- Working with Operations Section to establish any additional environmental protection strategies not identified in GRPs.
- Working with Operations Section to coordinate wildlife rescue/rehabilitation activities.
- Establishing Shoreline Cleanup Assessment Teams (SCAT).
- Using SCAT information to recommend shoreline cleanup recommendations, priorities, and restrictions.
- Providing guidance regarding "how clean is clean" decisions.
- Providing technical review and recommendations regarding use of alternative technologies.
- Developing a disposal plan (note: Washington State Disposal Guidelines found in Chapter 9000).
- Providing information to JIC and media regarding natural resource concerns/impacts.
- · Coordinating with NRDA activities.

 Planning wildlife hazing operations under the guidance and authority of state and federal fish and wildlife agencies and in coordination with the Air Operations Branch.

The Northwest Area Committee and Region X Regional Response Team recognize that there is a shared responsibility between the Unified Command representatives. Plus it is broadly recognized that the critical phase of any response, regardless of size, is the initial hours after the spill. Given the importance of the Environmental Unit's duties, and because the responsibility and knowledge base for public resources lies with trustee agencies, it is in everyone's best interest to ensure that early critical response decisions are made by the most knowledgeable individuals quickly, efficiently and effectively. Therefore, it is the policy of the Northwest Area Committee that the Environmental Unit be led by a representative of a government natural resource trustee or environmental agency, if available. If no such agency representative is initially available or willing to lead the environmental unit, a responsible party representative may fill that role. Furthermore, as the response action matures, a transition to a responsible party designated Environmental Unit Leader may occur with the concurrence of the Unified Command. The Northwest Area Committee also encourages spill response plan holders and responsible parties to designate a Deputy Environmental Unit Leader, who will participate in all the meetings attended by and briefings made by the Environmental Unit Leader. These meetings and briefings include, but are not limited to, the following preidentified ICS scheduled events:

- Initial ICS 201 Briefing
- Tactics Meetings
- Planning Meetings
- Operations Meetings
- Unified Command Briefings
- Press Conferences

All trustee resource agency staff with environmental information/expertise should initially report to the Environmental Unit. This includes technical specialists (e.g., Scientific Support Coordinator) identified elsewhere within the ICS organization. However, it is recognized that the SSC is an independent advisor to the FOSC.

4300 Compliance Guidance

4310 Statutory Guidance - Federal

4311 Comprehensive Environmental Response, Compensation and Liability Act, 1980 (CERCLA)

Enacted by congress in 1980, it is also known as the Hazardous Substance Superfund as defined by 42 U.S.C. 9601 et seq. Its purpose is to provide for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment and the cleanup of inactive hazardous waste disposal sites.

# 4312 Federal Water Pollution Control Act (FWPCA) as amended by Clean Water Act (CWA) and Oil Pollution Act 1990 (OPA)

As listed in 33 U.S.C. 1251 et seq, the objective of the act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The goals of the Act include:

- The elimination of pollutants discharged into navigable waters.
- Attain water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and around those waters.
- Prohibits the discharge of toxic pollutants.
- Provides Federal financial assistance to construct publicly owned waste treatment works.
- Requires States to provide waste treatment management plans.
- Conducts research to develop technology in order to eliminate the discharge of pollutants into the navigable waters, waters of the contiguous zone, and the oceans: and
- Develop national policy for the control of nonpoint sources of pollution.

# 4313 National Historic Preservation Act (NHPA)

The National Historic Preservation Act of 1966 (Public Law 89-665) authorized the National Register of Historic Places, expanding Federal recognition to historic properties of local and State significance. The National Park Service in the U.S. Department of the Interior administers both programs. Regulations for these programs are contained in 36 CFR Part 60, National Register of Historic Places, and 36 CFR Part 65, National Historic Landmarks Program.

# 4314 Endangered Species Act (ESA)

**Endangered Species Act Consultation** 

Contact:

U.S. Fish & Wildlife Service

Oregon - (503)231-6179

Idaho - (208)334-1931

Washington - (360)534-9330

#### **NMFS**

Oregon - (503)230-5425/5428

Idaho - (208)378-5734

Washington - (206)526-6604

#### 4315 Resource Conservation and Recovery Act (RCRA)

Also known as the Solid Waste Disposal Act, it was enacted by congress as 42 U.S.C. 6901 et seq. The Congress declared it to be the national policy of the United States that, whenever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible. Waste that is nevertheless generated should be treated, stored, or disposed of so as to minimize the present and future threat to human health and the environment.

#### 4316 National Environmental Policy Act

As defined by 42 U.S.C. 4321 et seq., the purposes of this act are:

- To declare a national policy which will encourage productive and enjoyable harmony between man and his environment;
- To Promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man.
- To enrich the understanding of the ecological systems and natural resources important to the Nation: and
- To establish a Council on Environmental Quality.

#### 4320 National Responsible Party Policy

Under the FWPCA as amended by OPA90, the responsible party has primary responsibility for cleanup of a discharge. Per FWPCA Section 311 and OPA 90 Section 4201, an owner or operator of a tank vessel or facility participating in removal efforts shall act in accordance with the National Contingency Plan and the applicable response plan. FWPCA Section 311.(j)(5)(C) as implemented by OPA 90 Section 4202 states that these response plans shall:

- (i) Be consistent with the requirements of the National Contingency Plan and Area Contingency Plans;
- (ii) Identify the qualified individual having full authority to implement removal actions, and require immediate communications between that individual and the appropriate Unified command official and the persons providing personnel and equipment pursuant to this clause;

- (iii) identify, and ensure by contract or other means approved by the President, the availability of private personnel and equipment necessary to remove to the maximum extent practicable a worst-case discharge (including a discharge resulting from fire or explosion), and to mitigate or prevent a substantial threat of such a discharge;
- (iv) Describe the training, equipment testing, periodic unannounced drills, and response actions of persons on the vessel or at the facility, to be carried out under the plan to ensure the safety of the vessel or facility and to mitigate or prevent the discharge, or the substantial threat of a discharge;
  - (v) Be updated periodically;
  - (vi) Be resubmitted for approval of each significant change;

Each owner or operator of a tank vessel or facility required by OPA to submit a response plan shall do so in accordance with applicable regulations. Facility and tank vessel response plan regulations, including plan requirements for the coastal zone, are located in 33 CFR Parts 154 and 155, respectively. Facility response plan regulations for the inland zone are located in 40 CFR Part 112.

Each responsible party for a vessel or a facility from which oil is discharged, or which poses a substantial threat of a discharge, into or upon the navigable waters, adjoining shorelines or the Exclusive Economic Zone, is liable for the removal costs and damages specified in Subsection (b) of Section 1002 of OPA. Any removal activity undertaken by a responsible party must be consistent with the provisions of the NCP, the Regional Contingency Plan (RCP), the Northwest Area Contingency Plan, and the applicable response plan required by OPA. If directed by the Unified Command at any time during removal activities, the responsible party must act accordingly.

#### 4330 State and Local Compliance Guidance

#### 4331 Responsible Party

Specific responsibilities of the RP are as follows:

- Assessment of spill.
- Establishment of a command post, in concurrence with the other On-Scene Coordinator (OSC).
- Documentation/identification of type and quantity of oil or hazardous substance spilled.
- Containment of the oil spilled and protection of the environment, with a particular emphasis on sensitive areas.
- Provision of input relative to clean-up priorities (i.e. waste minimization).
- Timely and effective clean-up.
- Disposal of oil, oily waste, and Hazardous Substances.
- Restoration of damaged environment/natural resources.

- Communication with local, state, and national response agencies and organizations.
- Communication with media.
- Payment for damages.
- Steps to prevent reoccurrence of spills.
- Wildlife collection and care in conjunction with responsible state, local, and federal agencies.

The RP has the opportunity to conduct damage assessment when required by the state and/or when appropriate given the RP's available resources as determined by the Unified Command.

#### 4332 Washington

Any person responsible for discharging oil or hazardous substances to the waters of the state must immediately notify the National Response Center (NRC) and the Washington State Emergency Management Division (EMD). The responsible party is also encouraged to contact the appropriate office of the Department of Ecology (see page v.).

Waters of the state include lakes, rivers, ponds, streams, inland waters, underground water, salt waters, estuaries, sewers, and all other surface waters and watercourses within the jurisdiction of the state of Washington. For the notification requirements for spills of dangerous waste or hazardous substances to other than waters of the state, see Section 7000 of this plan.

Under the RCW 90.48.335, 90.48.336, and 90.48.142, Washington state has no limit on the liability of the responsible party for clean-up of the spill or damages caused by the spill. In addition, any party owning oil or having control over oil that enters the waters of the state in violation of RCW 90.48.320 shall be strictly liable, without regard to fault, for the damages to persons or property, public or private, caused by such entry.

If the responsible party is unknown, fails to respond, or fails to respond in a manner deemed adequate by the state OSC (SOSC) or the federal OSC (FOSC), the state or federal agency having jurisdiction may exercise the authority to take over the response and recover expenses from the spiller (RCW 90.48.335).

## 4333 Oregon

Under Oregon state law, the responsible party is required to immediately notify the Oregon Emergency Response System (OERS) and the National Response Center. (See the plan preface for notification numbers.) The responsible party is also encouraged to notify local response agencies through the 911 system.

Any person owning or having control over any oil or hazardous material spilled or released or threatening to spill or release is strictly liable without regard to fault. Any person who fails to clean up oil or hazardous materials immediately, when under obligation to do so, is responsible for the expenses incurred by DEQ in carrying out the cleanup project. Any person who does not make a good faith effort to carry out a cleanup project is liable to the DEQ for damages not to exceed three time the amount of expenses incurred by DEQ.

If a spiller is unknown, fails to respond, or the response is considered inadequate, the DEQ may exercise the authority to take over the response or contract for the cleanup of the spill. The DEQ may recover the costs of the cleanup (ORS 466.645).

#### 4334 Idaho

Idaho law requires that the responsible party immediately contact the Idaho Bureau of Hazardous Materials and Emergency Medical Services Center. (See the plan preface for notification numbers.)

The Idaho Hazardous Substance Control Act provides that the responsible party is strictly liable for emergency response to hazardous materials incidents.

#### 4335 Prevention Laws

#### 4335.1 Washington

#### 4335.1.1 Washington Prevention Requirements

The Department of Ecology has an extensive spill prevention program for both vessels and oil handling facilities. Spill prevention plans covering operational procedure, personnel policies, management practices, and technology are required for all tank vessels. Cargo and passenger vessels 300 gross tons or larger are screened for potential risk and inspected by Ecology vessel inspectors determine actual risk and mitigate through a system of accepted industry standards. All types of large commercial vessels are required to comply with Washington's rules for safe bunkering (refueling). Oil handling facilities are required to comply with operating and design standards, operations manuals, spill prevention plans, and training and certification programs. The Stare Pilotage Act requires tug escorts laden double-hull tankers over 40,000 deadweight tons.

#### 4335.1.2 Vessel Traffic System in Puget Sound

East of Dungeness Spit, participation in the Puget Sound Vessel Traffic System is mandatory for the following vessels:

- Vessels of 300 Gross Tons (GT) or more propelled by machinery
- Vessels of 100 GT or more carrying 1 or more passengers for hire
- Commercial vessels of 26 ft or more engaged in towing
- Each dredge or floating plant (33 CFR 161.101)

West of Dungeness Spit, participation in the cooperative Vessel Traffic Management System, as described in 33CFR161 Subpart B, is mandatory for the following vessels:

- Each vessel of 30 meters or more in length
- Each vessel towing alongside or astern or pushing ahead an object or objects where:
  - The combined length of the vessel towing and object being towed (including towline) exceeds 45 meters;
  - The vessel or object being towed is over 25 meters in length

#### 4335.2 Oregon

In accordance with Oregon Revised Statute (ORS) 776.405: No person shall pilot any vessel upon any of the pilotage grounds established under ORS 776.025 or 776.115 without being a licensed pilot under this chapter or a pilot trainee under the on-board supervision of a pilot licensed under this chapter.

This does not apply to:

- The master of a vessel under fishery, recreation, or coastwise endorsement provided under 46 U.S.C. Chapter 121;
- A vessel registered with the State Marine Board or a similar licensing agency of another state; or
- The master of a foreign registered fishing or recreational vessel, exempted by the board, of not more than 100 feet in length or 250 gross tons international.

#### 4335.2.1 Pilotage in Portland Area

Note: Proposed laws dealing with required escorts for tank vessels transiting the Columbia River will be addressed in a later release of this plan.

## 4336 Local Government Requirements

#### 4336.1 Washington

Under the Revised Code of Washington (RCW) 38.52, local government has the responsibility to prepare for emergencies including oil spills and hazardous materials releases. Some key responsibilities and authorities which relate to oil and hazardous substance spill planning and response are as follows:

Emergency Management is the preparation for and carrying out of all emergency functions, other than those for which the military is responsible, to mitigate, prepare for, respond to, and recover from emergencies or disasters, and to aid victims...and to provide support for search and rescue operations. (RCW 38.52.010 [1])

Each political jurisdiction (county, city and town) is directed to establish a local organization for emergency management. Each local organization shall have a director appointed by the executive head of the political subdivision, subject to the direction and control of such executive officer or officers. (RCW 38.52.070 [1])

Each political subdivision shall have the power to enter into contacts and to incur obligations necessary to combat disaster. Each political subdivision can exercise the powers herein without regard to time consuming procedures and formalities prescribed by law (except constitutional requirements). (RCW 38.52.070 [2])

The director of each local organization...may develop mutual aid agreements... with other public and private agencies... The State emergency management organization shall publish guidance. (RCW 38.52.090)

The governor and the executive heads of political subdivisions are directed to utilize the services of all public agencies, and the officers and personnel of all public agencies are directed to cooperate with the emergency management organizations of the state upon request notwithstanding any other provision of law. (RCW 38.52.110 [1])

Upon the declaration of a disaster by the governor, executive heads of political subdivisions and the director of emergency management of said political subdivisions may command the services and equipment of as many citizens as necessary.... (RCW 38.52.110 [2])

#### 4337 Disposal Guidelines

It is critical for the OSC in an immediate removal operation or the RPM in a remedial action to recognize that contaminated soils, dredge spoils, drums, tanks, refuse, water or other associated materials are to be considered hazardous wastes and must be disposed of as such in accordance with the Resource Conservation and Recovery Act (RCRA), as well as local and state regulations managing the disposal of hazardous wastes. Many of the removal actions employed by the OSC will in fact create a situation in which the OSC has assumed the responsibility as a generator of hazardous wastes. These wastes then become subject to the "cradle to the grave" manifesting procedures currently in effect under the governing RCRA regulations. The OSC must ensure that the hazardous waste generated from his/her removal actions be transported by an approved hazardous waste hauler to an approved hazardous Change 4

November 1, 1998

waste facility. The OSC should consider the possibility of employing on-site treatment

(e.g. incineration, biological treatments, chemical treatments, waste stream treatment methods, etc.). Approved and effective on-site treatment will often eliminate the dilemma affiliated with hauling hazardous waste to a hazardous waste facility - the dilemma of simply relocating your problem to some other geographic area where it may eventually develop into somebody else's problem.

Specific disposal information will be added to this section as it is developed. Also, for local disposal options, consult the GRP for the specific area being considered.

#### 4337.1 Washington

Disposal practices shall be in accordance with state disposal guidelines. Guidelines are available from Washington State Department of Ecology and can be seen in section 9620.

#### 4337.2 Oregon

The general policy of the Department of Environmental Quality is that, whenever possible, recovered oil and oily debris be recycled and reused, thereby reducing the amount of oily debris to be burned on-site or disposed of at a solid waste landfill. Spilled oils and oil contaminated materials resulting from control, treatment, and clean up shall be handled and disposed of in a manner approved by the Department.

# 4337.2.1 Classification and Segregation

The state of Oregon will utilize its access to federal samples taken by the Coast Guard. As necessary, the state will also utilize sampling capabilities of the DEQ laboratory. All oily waste and debris is classified as a specified waste in the state of Oregon.

The segregation of oily waste and debris is a key part of the disposal process. Oil recovered from an aquatic area will typically contain large amounts of water and debris. Excess water needs to be removed; it increases the amount of material to be transported and can cause problems for disposal facilities. It is most productive to segregate the waste on site to facilitate transportation and disposal. An oil/water separator or a vacuum truck should be available on site to complete this process. Oiled debris needs to be separated out as well. Oil and oily debris should be segregated into the following categories:

- Reuse/Recycle
- Incinerate

- Burn on site
- Landfill

#### 4337.2.2 Reuse/Recycle

Whenever possible, recovered oil and oily debris should be recycled and reused, thereby reducing the amount of oily debris to be burned on site or disposed of at a solid waste landfill.

#### 4337.2.3 Incineration

Facilities are available which are capable of burning combustible, oiled debris, subject to any emission limits or restriction of the Air Containment Discharge Permit and Solid Waste Disposal Permit, if applicable.

A 60-day letter permit can be obtained immediately from the Air Quality Division of the Department of Environmental Quality in Portland by the facility to change fuel. In order to obtain this permit, a written request must be submitted including a statement of anticipated emissions based on the petroleum product contaminating the debris to be burned. Consecutive permits may be issued, but an evaluation will be conducted by DEQ prior to combustion.

For a list of facilities capable of incinerating oily debris, consult the appropriate Geographic Response Plan.

#### 4337.2.4 On-site Burning

Although no specific sites have been identified, the DEQ may authorize a 60-day letter permit for controlled open burning of combustible, oiled debris on the Oregon Coast and portions of the Columbia River in accordance with Oregon Administrative Rules, Division 23. The 60-day letter permit may be obtained from the Air Quality Division of the DEQ in Portland. A written request is required to obtain the permit, and must include the anticipated emissions based on the petroleum product contaminating the debris to be burned. Controlled open burning is defined as follows from most to least preferable:

- Forced air pit incineration
- Tall stack burning with auxiliary air supply
- Pile burning with auxiliary air supply
- Pile burning

The DEQ would generally intend to require forced air pit incineration for burning proposed in or near any population center or sensitive area. Combustion efficiency enhancement through utilization of an air curtain or fan devices is generally recommended. There are several areas in Oregon currently regulated by local authorities. They are listed in Division 23 rules for open burning.

#### 4337.2.5 Landfills

There are several landfills which may receive oiled debris, subject to the rules for disposal of spill cleanup materials, any restriction of the Solid Waste Permits, any franchise restrictions, and the concurrence of the owner/operator. See Oregon Administrative Rules Chapter 340, Division 61 on solid waste management.

#### 4337.2.6 Interim Storage

Interim storage site selection will be made on a case-by-case basis. Oregon Administrative Rules Chapter 340, Division 61 on solid waste management addresses the definition of and guidelines for a "disposal site" which includes temporary storage sites.

A letter of authorization for six months can be obtained from the DEQ by written application. The application must contain specific criteria regarding the site; these criteria can be found in Oregon Administrative Rules Chapter 340, Division 61, page 5.

Recovered oil should be stored in sealable containers such as 55-gallon drums, portable pillow tanks, empty fuel storage tanks, tank trucks, barges, or any other available container that can be sealed to prevent spillage. If necessary, a pit can be dug to hold the waste and lined with plastic or polymeric sheeting to prevent leaching.

Oily debris should be placed in leak-proof containers, such as plastic bags or debris boxes, provided they are lined with plastic. Debris should be stored on impermeable sheeting to prevent penetration into the soil should a breach of the container occur.

Temporary storage sites should be located with good access to the cleanup operations and nearby streets and highways. Good sites are flat areas such as parking lots or undeveloped lots, with a minimum of slope to reduce potential contamination from leaching oil. Sites should be at least three meters above mean sea level. A 1- to 1-1/2 meter high earth berm should be constructed around the perimeter of the site and the site lined with an impermeable liner to the top of the berm.

After oiled debris is in storage, a monitoring program should be set up to ensure that oil is not escaping outside the berm. Free oil accumulation within the bermed area should be monitored as well.

#### 4337.2.7 Transportation

Transportation of oiled debris to its disposal destination is the contractor's responsibility. Certified haulers should be used. Trucks should be lined with plastic or otherwise made leak-proof in order to prevent leakage during transport.

#### 4337.3 Idaho

## 4338 Volunteer Management Policy

#### 4338.1 Washington

During past oil spills, Washington State citizens have expressed an interest in providing assistance in oil spill response efforts including wildlife rescue, support services, and beach cleanup. In fact, Washington State law (RCW 90.56.100) mandated the development of a Wildlife Rescue and Response Program which relies on the use of volunteers. The law also established the Washington Wildlife Rescue Coalition which is made up of state, federal, and private organizations.

The Coalition, through its Wildlife Rescue Coordinator, will work with the responsible party to implement Washington's Wildlife Rescue and Response Plan. The Coalition was mandated to:

- Develop a mobilization plan to rescue and rehabilitate wildlife during a spill
- Develop a directory of persons, agencies, and organizations that may provide assistance
- Provide advance training to volunteers
- Obtain and maintain equipment and supplies to support its efforts.

In response to the first of these mandates, the Wildlife Rescue and Response Program developed the Washington State Volunteer Management Plan, the purpose of which is to provide guidance for the use of volunteers. Section 3 of the plan, "Wildlife Volunteer Management," contains a compilation of requirements and procedures found in the Washington Wildlife Rescue and Response Plan. At this time, the plan only covers oil spills to marine waters.

While state law clearly mandated the establishment of a program which relies on volunteer assistance in wildlife rescue, the law is silent regarding volunteers for tasks not related to wildlife (e.g., beach cleanup). Thus, the main emphasis of the State Volunteer Management Plan will be on wildlife rescue volunteers, and

will identify potential opportunities for volunteers for other tasks if determined by the Unified Command. Section 4 of this plan identifies a means for the use of volunteers not related to wildlife rescue.

#### 4338.2 Oregon

#### 4338.3 Idaho

# 4400 Environmental Sensitivity Indices, Maps & Information -- Geographic Response Plans (GRPs)

#### 4410 Puget Sound, Washington COTP Area of Responsibility

- GRP: Washington Outer Coast
- GRP: Strait of Juan de Fuca
- GRP: San Juan Islands/North Puget Sound
- GRP: Hood Canal/Admiralty Inlet
- GRP: North Central Puget Sound
- GRP: Central Puget Sound
- GRP: Sound Puget Sound
- GRP: Nisqually River (TBD)

### 4420 Environmental Protection Agency Area of Responsibility

- GRP: Snake River/:Little Goose Area
- GRP: Snake River/Lower Monumental Area
- GRP: Snake River/Ice Harbor Area
- GRP: Snake River/Lower Granite Area
- GRP: Spokane River (TBD)
- GRP: Middle Columbia River/Bonneville Pool
- GRP: Middle Columbia River/Dalles Pool
- GRP: Middle Columbia River/John Day Pool
- GRP: Middle Columbia River/McNary Pool

#### 4430 Portland, Oregon COTP Area of Responsibility

- GRP: Grays Harbor, Washington
- GRP: Willapa Bay, Washington
- GRP: Lower Columbia River/Washington/Oregon
- GRP: Tillamook Bay
- GRP: Yaquina Bay
- GRP: North Oregon Coast
- GRP: South Oregon Coast
- GRP: Coos Bay

#### 4500 General Response Priorities

#### 4510 General Hierarchy of Response Priorities

Specific strategies for response to spills in sensitive areas are detailed in the Geographic Response Plans (GRP). General Response Priorities are:

- Protect human life and health
- Minimize ecological impacts
- Minimize economic and public impacts

#### **4600 Strategic Response Options**

#### 4610 Sensitive Areas

Environmentally sensitive areas are identified in the 23 Geographic Response Plans (GRPs) listed in section 4400. GRPs represent the collective input of natural resource trustee agencies and spill response organizations regarding environmental protection strategies for a given area. The objective of these plans is to reduce decision-making time during the initial hours of response to a major spill so that protection strategies can be implemented immediately. GRPs contain maps and descriptions of sensitive public natural and cultural resources, identify strategies to protect those resources, and set priorities for various spill scenarios. The Environmental Unit will supplement GRPs with other "real-time" information (e.g., wildlife surveys) to develop any spill-specific changes or additions to protection priorities.

Note that private economic resources, such as commercial marinas, are not addressed by GRPs or the Environmental Unit. These resources are assigned the lowest in priority for protection. Development of any protection strategies for private economic resources therefore falls under the duties of the responsible party.

In general, GRPs include the following types of response strategies:

- No action appropriate when weather, sea, or other conditions make other
  options unsafe and/or infeasible. Also appropriate when response actions or
  site access will cause further environmental damage (e.g., wetlands).
- On-water recovery mechanical removal of floating oil by sorbent materials, vacuum trucks, and skimming devices.
- Subtidal recovery mechanical removal of sunken oil by dredges, pumps, or submersible equipment.
- Exclusion Booming deploying various types of boom to keep oil out of a sensitive area.
- Deflection Booming deploying various types of boom to divert oil away from a sensitive area and/or divert oil toward a collection point.

- Shoreline cleanup ranging from deploying sorbents for passive cleanup to bioremediation; see NOAA's Shoreline Countermeasure Matrix for detailed list of options.
- In-situ Burning burning oil on the water; usually requires containment by fire-resistant boom. See Section 4641 for more NWAC policy on in-situ burning use.
- Dispersants applying chemical agents, usually by aircraft, to aid in breaking up surface slicks and dispersing oil within water column. See Section 4631 for more NWAC policy on dispersant use.

#### 4620 Dispersants

Dispersants, or chemical herders, will not normally be used without the concurrence of the Environmental Protection Agency and the state with jurisdiction over the navigable water polluted by the discharge. Mechanical means such as booms, mesh screens, sorbents, and deflecting techniques such as propwash and flushing hoses are approved techniques for cleanup. Section 4622 contains a checklist developed to aid the OSC in reaching a decision on whether the use of dispersants is the best course of action.

NOTE: The FOSC may authorize the use of dispersants, chemical herders and other agents and additives without obtaining the concurrence of the EPA or state when, in the judgment of the FOSC, the use of the product is necessary to prevent or substantially reduce a hazard to human life.

#### **4621 Dispersant Use Policy**

#### 4621.1 Washington

The state of Washington has prepared a dispersant use policy and EIS to address use of dispersants in the state. This document is to be used primarily by state, federal, and responsible party personnel in the planning and implementation of dispersant use decisions during major oil spills in coastal waters in and adjacent to Washington. The goal of the dispersant management plan is to optimize protection for natural resources. This goal was accomplished by the establishment of specific dispersant use sub-regions accompanied by specific guidelines and standards for use in all such sub-regions. The policy provides guidance for the on-scene coordinator to make decisions for the use of dispersants based on conditions for preapproval, plus guidelines and standards for use in all sub regions.

The dispersant policy guides all oil dispersant use activities and establishes standards and guidelines for appropriate applications. The plan describes the ranking of natural resource values and evaluates dispersant management practices as a tool for protecting those resources.

The dispersant use policy embodies the provisions of state and national contingency plans and other guiding documents.

The decision to approve or disapprove dispersant use is based on the seasonal Analysis of the Resource Situation (ARS) in each individual subregion (subregions described in EIS). The ARS is an examination of the present level and vulnerability of public resources and is used as the basis for examination of the effects of dispersant use on those resources. As part of the ARS, benchmarks for resources were developed to provide information about the present resource levels. These benchmarks define the extent and vulnerability of resources so that tradeoff decisions concerning those resources can be examined.

Each dispersant use decision is governed by a comparative natural resource evaluation, based on the resource type, number and sensitivity to oil and/or dispersants in each marine and estuarine subregion described in the Oil Spill Compensation Schedule WAC 173-183. The subregional scores (Tables 1-20, Appendix C in EIS) describe the present and, as a minimum, the desired future condition of natural resources in the marine and estuarine waters. The maintenance of these outputs and activities is considered to be the goal the state should meet via implementation of this policy.

Coastal and marine waters of the state have been divided in 132 subregions for purposes of ranking comparative natural resource values (WAC 173-183). Individual subregions were scored on a 1-5 basis (1-low to 5-high) for each of seven natural resource categories; habitat, marine mammals, birds, marinefish, shellfish, salmon and recreation. WAC 173- 183-400 describes, in detail, the methodology for scoring.

The evaluation leads to the selection of preapproved, conditional approval and no approval dispersant use sub-regions based on the comparative resource values by subregion and season. All decisions are based on the fact that there are known tradeoffs associated with the use of dispersants and when these are weighted against the resource value to be protected, there may be times when the value of the resource portection outweighs the added potential loss to another resource value from the use of dispersants.

Chemical dispersants may be authorized in regions when it is judged that the advantage of using the dispersant outweighs the impacts of allowing untreated oil to enter other sensitive environments or damage unique wildlife/fish populations. Three dispersant use decision categories are possible in each subregion. The decision is based on the known biological consequences of dispersant use in the specific region verses its use as a method to protect valuable fish and wildlife habitat and species in other areas.

The EIS contains the area-wide standards and guidelines that apply to all dispersant use applications in marine and estuarine waters. Authorization for Change 4 4-24

approval of dispersants within any subregion was based on meeting all of the following criteria:

- A critical evluation of resources and habitats in the spill zone
- Potential of critical habitats remote from the spill site being impacted by undispersed oil
- Potential of critical aggregations of fish, birds, and marine mammals remote from the spill site being impacted by undispersed oil
- Meteorological and oceanographic conditions that suggest that the undispersed oil trajectory will, in fact, impact these remote fish and wildlife aggregations and/or habitats
- Assume adequate delivery system
- Environmentally acceptable dispersant available
- Preliminary tests have shown that the RP can deliver dispersant effectively.

#### **4621.2 Oregon**

According to OAR 340-47-020, no chemicals shall be used to disperse, coagulate, or otherwise treat oil spills except inert absorbent materials that are completely removed in the clean-up process or other materials as may be specifically approved by the DEQ. Physical removal of oil spills will ordinarily be required except where use of chemical dispersants is warranted by extreme fire danger or other unusually hazardous circumstances. DEQ will consider each request for approval of dispersant use on a case by case basis.

## 4622 Dispersant Use Checklist

- 1. Introduction. This checklist is intended to aid the UC in reaching a decision on whether the use of dispersants is the best course of action for a potential or actual oil spill mitigation. It also provides a familiar listing of data to all RRT members involved with the decision to allow the use of dispersants. The following sequence of events should normally be followed for an oil spill in which the UC wishes to use dispersants.
- a. The decision to use dispersants must be made as soon as possible after a spill occurred before substantial weathering takes place or the oil has spread. Therefore, early in the spill response the UC should evaluate the potential use of dispersants. If the UC feels the potential for dispersant use exists he/she should have his staff gather the information necessary to complete the dispersant checklist. He/she also should request RRT activation to prepare the RRT for review.
- b. If upon completion of the dispersant checklist the UC decides the use of dispersants is the best course of action the checklist information should be passed to the RRT for final decision on its use.
- 2. The following steps should be utilized in deciding if the use of dispersants will be required. (An immediate threat to life which can be substantially lessened by the use of dispersants pre-empts the following matrix by the UC.)

a.	Com	pilatior	n of Data.
	(1)	Spill	data
		_ (a)	Circumstances (fire, grounding, collision, etc.):
		_ (b)	Time/Date of incident:
		_ (c)	Type of oil product:
		_ (d)	List bulk chemicals carried and their volumes:
		_ (e)	Volume of product released:
		_ (f)	Total potential of release:
		_ (g)	Type of release (instantaneous, continuous, intermittent
			etc.):
	(2)	Chai	acteristics of the spilled oil
		_ (a)	Specific gravity:
		_ (b)	Viscosity:
		_ (c)	Pour point:
		_ (d)	Volatility (flash point):
		(e)	Relative toxicity:

(3)	Weat	her and water conditions/forecasts
` '	(a)	
	(b)	Tide and current information:
		Sea conditions:
		Water temperature and salinity:
	(e)	Water depth and depth of mixed layer:
(4)	Traje	ctory information
	(a)	48-hour oil trajectory forecast:
		1 Surface area slick:
		2 Expected areas of landfall:
	(b)	48-hour dispersed oil trajectory forecast:
		Oil movement in water column:
		2 Surface oil movement in water column:
		column:
		acteristics of available dispersants
	(a)	Characteristics of the dispersants:
		Product 1 Product 2 Product 3
		1 Name
		2 Manufacturer
		When available
		4 Location(s)
		5 Amount available
		6 Type of containers
		a Toxicity
		D. C. C. C.
		e Other
		8 Application methods
		9 Miscellaneous
		Type of transportation and dispersing equipment:
		Company 2 Company 3 1 Name
		2 Location
		2 Time to arrive
		Time to arrive Equipment available
		5 Other
(6)	Info a	bout available dispersant & dispersing equipment.
	(a)	Name of proposed dispersant on EPA and State acceptance
	(u)	lists:
	(b)	Type (self-mix, concentrate, etc.):
	(c)	Proposed application methods and rates:
	(d)	Efficiency under existing conditions:
	(~)	(% dispersed and volume dispersed)
	(e)	Location of the area to be treated:

	_ (f) _ (g)	Surface area of slick treatable in scheduled time period: Estimated time interval between dispersant application and
	_ (9)	sensitive environments/resources:
(7)	Com	parison of effectiveness of conventional cleanup methods vs.
( )		use of dispersants:
	_ (a)	Containment at the source:
	` '	Shoreline protection strategies:
	_ (c)	Shoreline cleanup strategies:
	` ,	Time necessary to execute response:
	` '	tats and resources at risk
	_ (a)	
		_ Dispersant treated spill Untreated spill
		_ 1
		_ 2
		_ 3
		_ 4
	_ (b)	Resources
		Dispersant treated spill Untreated spill
		_ 1 Endangered/threatened species (state and federally
		designated)
		_ 2 Critical habitats for the above species
		_ 3 Marine animals (pupping, migration)1
		_ 4 Waterfowl use (nesting, migration)
		_ 8 Public use areas (parks, marinas, etc.)
		_ 9 Other resources of specific significance
(9)	Ecor	nomic Considerations
	_ (a)	
	_ (b)	Cost of conventional containment and protection:
		_ 1 With dispersant use
		_ 2 Without dispersant use
	_ (c)	Cost of shoreline cleanup: (cost per barrel x number of
		barrels reaching the shoreline)
		_ 1 With dispersant use
		_ 2 Without dispersant use
Reco	mmen	dation to the RRT
(1)	Poss	sible options:
	_ (a)	Do not use dispersants.
	_ (b)	Use dispersants on trial basis, but not as control/cleanup
		technique.
	_ (c)	Disperse in limited or selected areas.
	_ (d)	Disperse to the maximum extent possible with accepted
	- ,	methods and available equipment.
(2)	Othe	er recommendations/rationale:
Cons	sequen	ices of a dispersant application decision.

Change 4 November 1, 1998

b.

- (1) Will application of dispersant remove a significant amount of the slick from the surface of the water?
- (2) Can the extent or location of shoreline impacts be altered in a positive manner?
- (3) Can the damage to endangered or threatened species, marine mammals, and waterfowl be lessened?
- (4) Will the damage to habitats and resources resulting from chemical dispersion be less than those resulting without chemical dispersion?
- (5) If recreational, economic and aesthetic considerations are higher priority than natural resource considerations what is the most effective means of their protection?
- 3. Criteria For Monitoring Dispersant Use: Dispersant applications in the region will be monitored as a general practice. The UC is responsible for designating monitors. The Pacific Strike Team may serve as monitors as available. There are two levels of criteria suggested: required and desirable. The proposed criteria follow.

a.	REQUIRED	<b>)</b> :
	(1) Reco	ords:
		Dispersant brand
	(b)	Equipment and methods used in application
	(c)	Dilution of dispersant prior to application, if any
	(d)	Dilution of dispersant prior to application, if any Rate of application (gallons per acre, dispersant to oil ratio
	(e)	Times and area of application
	(f)	Tracts of vessels or aircraft during application
	(g)	Wind and wave conditions during application.
	(2) Effect	ctiveness: Visual and photographic documentation, by
	qualified ob	servers, of;
	(a)	Oil before and after dispersant application, and
	(b)	Re-surfacing of dispersed oil.
	(3) Envi	ronmental Impacts: Visual and photographic surveys of:
	(a)	The extent of shoreline impact by dispersed and
		undispersed oil
		Mortality or abnormal behavior by fish, birds or mammals.
b.	DESIRABLI	
		ctiveness: Sampling of the water beneath the oil slick and the
	•	ersant combination to determine the level of petroleum
	•	ns in the water. This sampling could include "in-situ"
		ents or sample collection for later analysis.
	` '	ronmental impacts:
	(a)	Comparison of shoreline areas impacted by oil and oil and
		dispersant mixtures
	(b)	
		oil
	(c)	
		impacts due to dispersed oil

\_\_\_\_(d) Collection and analysis of birds affected by dispersants or dispersants and oil mixtures

#### 4630 In-Situ Burning

In-situ is the Latin term for "in place". In-situ burning as it relates to oil spills is the controlled burning of oil on water at the spill site. While the focus of the policy is on open-water areas in the marine environment, it also applies to in-situ burning in inland areas.

#### 4631 In-Situ Burning Policy

The purpose of the policy is to define the conditions under which burning may occur on a pre-approved or case by case basis and define conditions under which burning will not be allowed. The complete policy defines the procedure for arriving at the decision to burn or not to burn, describes the regulatory and statutory framework, and provides background information on logistics. environmental impacts, health and safety, and monitoring. The policy applies to all marine waters as well as inland areas covered by the Northwest Area Plan. This section summarizes key sections of the policy.

It is the policy of the Northwest Area Committee to use, and in certain cases, encourage in-situ burning, provided that requirements specified herein have been met. A primary consideration in the decision to burn is the protection and safety of human life. The authority to approve a burn rests with the Unified Command, who must determine that an application to burn conforms with these guidelines. The decision to burn or not burn must be made expeditiously.

Preapproval areas are defined as those areas which are more than three miles from population. All other areas will be considered on a case-by-case basis. Monitoring and sampling will be conducted where there is the potential for people to be exposed to the smoke. As general guidance, people should not be exposed to small particles (PM-10) in concentrations that exceed 150 micrograms per cubic meter of air averaged over one hour. The concentrations should never exceed 150 micrograms per cubic meter averaged over 24 hours.

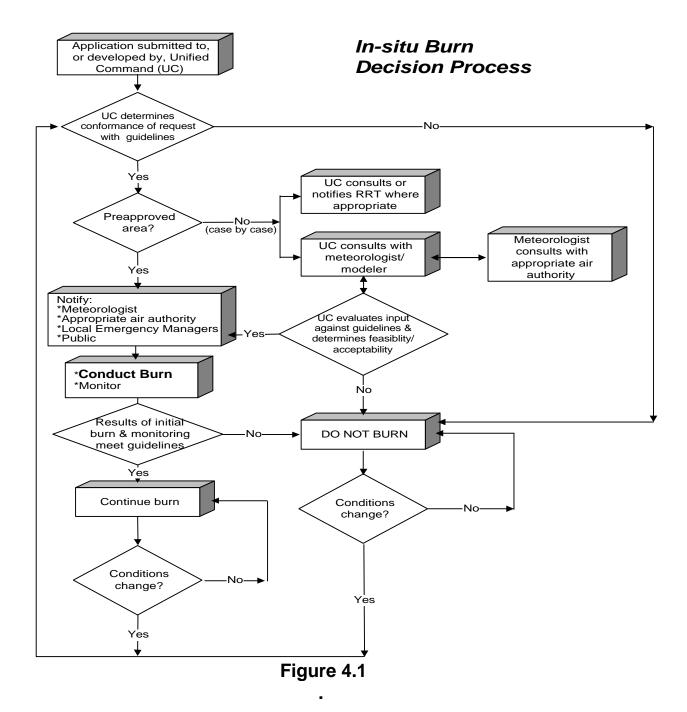
#### 4632 Authorization Procedures

These guidelines provide a common decision-making process to evaluate the appropriateness of using in-situ burning during a spill response. The process is based on the premise that a rapid decision is essential if in-situ burning is ever to be used since oil emulsifies (becomes mixed with water) and is more difficult to ignite as time goes on. Therefore, the fewest number of decision-makers as possible are involved in deciding whether or not to burn.

Under these guidelines, authorization to use in-situ burning rests with the Unified Command (UC). The UC consists of federal, state and responsible party on-scene coordinators as well as local and tribal on-scene coordinators, as appropriate. The UC, as part of the Incident Command System (ICS), is

4-31 Change 4

responsible for overseeing the entire response effort, which includes the decision to use in-situ burning. The decision process is greatly expedited by the use of the unified command structure, by the establishment of a single application (see attached checklist and worksheet located after the decision process flowchart), and mutually agreed upon operational controls. Figure 4.1 summarizes the In- situ burn decision process.



### **In-Situ Burning Application**

The following checklist and worksheet are provided as a summary of important information to be considered by the Unified Command in reviewing any request to conduct in-situ burning in response to an oil spill in Washington, Oregon, and Idaho waters. The flowchart shown in figure 4.1 summarizes the process for making a burn decision. The decision to burn involves three basic factors. If the oil has ignited due to collision or another means, allowing continued burning may be unavoidable or beneficial. Second, the decision to burn must consider whether this tool will offer a greater level of efficiency in removing oil on water and/or reducing oil impacts to sensitive resources. Third, the decision must evaluate whether it is practical, feasible, and safe to burn given the spill and conditions involved.

The application process begins with a simple preliminary feasibility analysis. If that analysis concludes that in-situ burning may be feasible, the application checklist and window-of-opportunity worksheet should be completed. The checklist is divided into several sections of information about the spill, weather, proposed burning plan, and potential impacts. Most checklist questions reference items on the worksheet. When completed, the checklist and worksheet will identify the window-of-opportunity when insitu burning would be allowed based on environmental, public health, and operational constraints. Note that the checklist must be updated for each new burn scenario proposed. It is important to note that even if the checklist and worksheet fail to show that in-situ burning is appropriate at one point in time (i.e., a "NO" answer), changes in environmental or other factors may make in-situ burning a feasible option at a later time.

# A. Preliminary Feasibility Analysis

<ul> <li>1. Is the spilled oil already burning? Yes No</li> <li>→ If yes, skip remaining questions and proceed with the rest of application.</li> </ul>
2. Are prevailing and forecasted winds and atmospheric conditions likely to cause heavy smoke exposure to populated areas? Yes No → If no, proceed with question 3.
3. Do natural resource managers concur that in-situ burning will cause less overall harm to marine resources (e.g., heat, burn residue) than the harm to those resources anticipated if in-situ burning does not occur (e.g., oiling of shorelines, wildlife, kelp, etc)? Yes No  → If yes, proceed with question 4.
4. Are equipment and trained personnel available to conduct in-situ burning operations? Yes No  → If yes, proceed with question 5.
5. Is the oil concentration and type suitable for containment and burning?. Yes No  → If yes, proceed with rest of application.

If any answer to the above questions does not result in instructions to proceed with the application, approval of an in-situ burning application is very unlikely at this point of time until conditions change.

4-33

# **B.** Application Checklist

1.	Spi	pill Data		
	a.	Date of incident (month/date/year): Time of incident:		
	b.	Name of incident/responsible party :		
	c.	Location of incident		
	d.	Type(s) of oil spilled:		
	e.	Estimated volume of oil spilled into water:		
	f.	Estimated volume of oil at risk of spilling:		
	g.	Release status: Stopped Intermittent Continuous Outflow Rate:		
	h.	Forecasted surface area of spill at time of projected burn:  Continuous slick Large patches Ribbons/streamers		
	i.	Will oil concentration be sufficient to burn? Yes No → See #1 on worksheet		
	j.	Anticipated oil trajectory (attach NOAA forecasts if available):		
	k.	Forecasted oil distance/direction to nearest land at time of projected burn:		
	l.	Expected areas and times of shoreline oil impact:		
		→ See #2 on worksheet		
	m.	Estimated percentage of natural dispersion and evaporation during: first 24 hours second 24 hours		
	n.	Oil emulsification at this time: Unknown None Light (0-20%) Moderate (21-50%) Heavy (over 50%)		
	0.	Will emulsification likely be less than 50% at projected time of burn?  Yes No Unknown → See #3 on worksheet		
	p.	Distance (in miles) and direction to nearest population center (> 100 people per sq. mile):		
	q.	Name of nearest population center:		

2.	Weather/Environmental Conditions at time of projected burn			
	a.	Temperature: Air = F Water = F		
	b.	Weather: Clear Partly cloudy Overcast Rain Fog Snow Freezing		
	c.	Surface visibility Ceiling level		
	d.	Is prevailing and forecasted visibility more than 500 ft. vertically and 0.5 mile horizontally? Yes No → See #4 on worksheet		
	e.	Surface current: Speed Direction		
	f.	Wind conditions: Speed Direction (from)		
	g.	<ul> <li>Are prevailing and forecasted winds less than 25 knots? Yes No</li> <li>★ See #5 on worksheet</li> </ul>		
	h.	Tide state: Flood Ebb Slack Water		
	i.	Sea State: Calm Choppy Swell (in feet)		
	j.	Waves: Less than 1 ft 1-3 ft More than 3 ft Direction (from)  → See #6 on worksheet		
	k.	Other weather/sea condition information:		
3.	Pro	Proposed Burning Plan		
	a.	Location of the proposed burn relative to the spill site:		
	b.	Location of the proposed burn relative to nearest ignitable slick(s):		
	c.	Location and direction of the proposed burn relative to nearest land:		
	d.	Can accidental fires be avoided? Yes No If yes, what actions are planned:		
	е.	Can ignition/burn occur at a safe distance from other response operations and public, recreational, and commercial activities? Yes No → See #7 on worksheet		
	f.	Method(s) used to notify residents living within the potential smoke plume trajectory:		
		→ See #8 on worksheet		

g.	Method(s) used to notify mariners and aircraft pilots:
h.	Method(s) used to avoid impacts to marine life in vicinity of burn:
i.	Type of ignition system proposed for use:
j.	When will ignition system, fire-resistant boom, and deployment equipment/vessels be on-scene and available for use?  → See #9 on worksheet
k.	How will ignition be carried out:
l.	If a helitorch ignition system is to be used, is the helicopter qualified for offshore flight and does it meet FAA certification requirements? Yes No
m.	Method used to collect/concentrate oil, if any:
n.	Amount of fire boom available for use at time of projected burn: feet  → See #9 on worksheet
0.	Number of boom-towing vessels and support vessels available:
p.	Proposed location of oil containment relative to spill source:
q.	Proposed burning strategy:  Immediate ignition at or near source  Ignition away from source after containment and movement to safe location  Controlled burning in boom or natural collection site at or near shore  Possible need for multiple ignition attempts.
r.	Are floating debris and other safety hazards acceptable? Yes No
s.	Are sufficient numbers of trained personnel available on-scene to conduct safe and effective burn? Yes No → See #10 on worksheet
t.	Estimated amount of oil to be burned:
u.	Estimated duration of burn:
v.	Method of collecting burned oil residue:
w.	Estimated amount of burned oil residue to be collected:
х.	Proposed interim storage and disposal of burned oil residue:
y.	Back-up plan for collecting contained oil if burn fails:

Change 4 November 1, 1998

I.	Burn Impacts				
	a.	Is adequate air modeling support available? Yes No			
	b.	Do prevailing conditions and air modeling results indicate that PM-10 standards can be met? Yes No → See #11 on worksheet			
	с.	Will visibility remain safe at sensitive locations (e.g., airports, freeways)? Yes No			
	d.	Are adequate air support and burn monitoring equipment on-scene and available?  Yes No <b>→</b> See #12 on worksheet			
	e.	How will operational impacts to wildlife in vicinity be monitored?			
_					
	Name of Application Preparer:				
	Date/Time Submitted to Planning Section Chief:				
	Approval by Planning Chief:				
	Unified Command Decision:				
	Approval to implement burn plan				
	Approval to conduct small pilot burn				
	Burn plan disapproved at this time				

#### Window of Opportunity Worksheet

Spill Name:	Spill Time and Date:
<u>-</u>	opin rime and bate.

This worksheet should be filled out in conjunction with the In Situ Burning Application Checklist. Fill in top row based on time of incident (e.g., if incident is at 0300, fill that in for hour 1; 0400 for hour 2, etc.). For each worksheet item, mark in each time segment where the item applies. The likely window-of-opportunity equates to those time segments where all items are marked.

Window of Opportunity	Hr. 1	Hr. 2	Нг. 3	Нг. 4	Hr. 5	Hr. 6	Hr. 7	Hr. 8	Hr. 9	Hr. 10	Hr. 11	Hr. 12	Hr. 14	Hr. 16	Hr. 18	Hr. 20	Hr. 22	Hr. 24	Hr. 28	Hr. 32	Hr. 36	Hr. 40	Hr. 44	Hr. 48	Hr. 52	Hr. 56	Hr. 60	Hr. 64	Hr. 68	Hr. 72
	Time;	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:
Feasibility Factors	j	-					İ	Ì								ĺ							l		İ					
Spill Data/Environmental Con-	dition	s			0.85	- 38		1 4		1 4	S	A NO.	- 32	44.0			ALC: NO				1,283		- K					35	1.2	
Oil concentration is suitable for containment & burning																											7,000			
Burning can still reduce significant shoreline impacts																														
3. Oil emulsification is less than 50%																														
4. Visibility > 500 ft. vertically & > 0.5 mile horizontally																														
5. Wind speed is less than 25 knots																														
6. Wave height less than 3 feet																														
Proposed Burning Plan	- 65			JAH.			3111	44.5				A. 1860	113	£77	1/24	. Y.	7000									200		1170		S-12-5
<ol> <li>Burn can occur at safe distance from public &amp; activities</li> </ol>																														
Public notification needs have been addressed																														
All burn equipment on- scene and ready																														
10. Trained personnel on- scene & ready																														
Burn Impacts		11-675 11-675			- 14690 A		3.00					4 1				/		·			\$50.S	-				100		100		
11. PM-10 standards can be met																	i													
12. Air monitoring equipment & support are set up & ready																														

Authorization procedures will differ depending upon whether the spill location is in a preapproval area or is decided on a case-by-case basis. Regardless of location, the UC directs actions that will provide for maximum environmental protection while ensuring human safety.

#### **4632.1 Exposure Limits for Emissions**

Since burning will almost always provide for the greatest degree of environmental protection, a key issue is for the UC to ensure that pollutants from in-situ burning emissions do not have a significant adverse impact to human health. The primary pollutant of concern is PM-10, the small particulate matter contained in the smoke plume. It is generally accepted that other pollutants dissipate, reaching background levels well before PM-10 does. An in-situ smoke plume usually stays well above ground level, hundreds to thousands of feet, but can reach the ground under certain atmospheric conditions. An exposure standard for PM-10 has been established for these guidelines. In-situ burning will not be approved if there is significant risk that the standard would be exceeded where people are located. Background levels will be taken into consideration when determining risk.

As general guidance, people should not be exposed to concentrations greater than 150 micrograms per cubic meter averaged over one hour. A meteorologist, responsible for evaluating weather data and information in the area proposed for an in-situ burn, will incorporate this standard in assessing health risks. However, some flexibility and professional judgment may be necessary. Therefore, the standard incorporates a cap for PM-10 exposure not to exceed 150 micrograms per cubic meter averaged over a 24-hour period. The UC should ensure that an approved burn is within this standard. The UC must also weigh the risk to people of the volatiles that evaporate from unburned oil. In some cases, it may be less harmful to people to burn the oil rather than let part of it evaporate.

#### 4632.2 Preapproval

Once the UC determines that the application to burn conforms to the PM-10 standard, then the UC determines if the spill location is in a "preapproval area." Preapproval areas include any area that is more than three miles from human population. Human population is defined as 100 people per square mile. If a potential burn site is in a preapproval area, then the meteorologist, appropriate air pollution control authority, local emergency manager and the public are notified. Preparations will be made for monitoring the burn immediately following notification. (Note: Preapproval refers to certain locations where burning is allowed with minimal steps to be taken to conduct the burn. Several prior procedures must still be undertaken, including application submittal and approval, and notifications.)

#### 4632.3 Case-by-Case

If the UC determines that the application conforms with the guidelines but is not in a preapproval area, then approval to burn is considered on a case-by-case basis. The UC notifies the Regional Response Team (RRT). In cases where the RRT's expertise is needed, then the RRT will be consulted. At this stage, the UC consults with the meteorologist to obtain weather data and information on the potential concentrations of pollutants that may reach a populated area from both burned and unburned oil. The meteorologist consults with the appropriate air pollution control authority for more information. Data will also be obtained from a predictive smoke plume model whenever possible. Modeling information will not be relied upon exclusively but considered as part of the information package. The UC then evaluates all available information and determines the feasibility and acceptability of in-situ burning based on these guidelines. If the decision is yes, then the same procedures apply as those for preapproval areas. If the decision is no, then the burn will not be conducted. If conditions change, the application will be re-evaluated.

#### 4632.4 Not Allowed

If the application to burn is not in conformance with these guidelines, in-situ burning will not be allowed. Conditions will be monitored in case there is a change which would make in-situ burning appropriate and feasible. While no geographic areas have been excluded from the consideration to use in-situ burning, it is very unlikely that it would be approved in a heavily populated area such as inner Puget Sound or on the Columbia River near Portland because of the increased potential for exposing people to high levels of particulates. However, even in highly populated areas, burning may still be approved in unique circumstances, especially when the volatiles from the unburned oil pose a serious threat to human health.

#### 4632.5 Monitoring

Monitoring should always be incorporated as part of standard in-situ burning operations, however in some cases, especially in remote areas, it may be difficult or not possible to monitor. Information from monitoring, sampling, and computer modeling will be continuously evaluated to ensure the burn is conducted safely and to gather historical data to enhance our knowledge of in-situ burning. Weather and sea conditions will also be continuously monitored, and, if conditions become unfavorable, the burn may be extinguished.

## 4640 Decanting

When oil is spilled on the water, mechanical recovery of the oil is the principal approved method of responding. However, the mechanical recovery process and associated systems necessarily involve placing vessels and machinery in a floating oil environment. Incidental returns of oil into the response area, such as oil that falls back

into the recovery area from vessels and machinery that are immersed and working in the oil, are an inevitable part of the mechanical recovery process. Similarly, separation or "decanting" of water from recovered oil and return of excess water into the response area can be vital to the efficient mechanical recovery of spilled oil because it allows maximum use of limited storage capacity, thereby increasing recovery operations.

This practice is currently recognized as a necessary and routine part of response operations that is appropriately addressed in Area Contingency Plans. (See National Contingency Plan Revisions, 59 F.R. 47401, Sept. 15, 1994.) In addition, some activities, such as those associated with oil recovery vessels, small boats and equipment cleaning operations, may result in incidental discharges. These activities may be necessary to facilitate response operations on a continuing basis, and all of these activities are considered to be "incidental discharges."

#### **4641 Decanting Policy**

This policy addresses "incidental discharges" associated with spill response activities. "Incidental discharge" means the release of oil and/or oily water within the response area in or proximate to the area in which oil recovery activities are taking place during and attendant to oil spill response activities. Incidental discharges include, but are not limited to, the decanting of oily water, oil and oily water returns associated with runoff from vessels and equipment operating in an oiled environment and the wash down of vessels, facilities and equipment used in the response. "Incidental discharges" as addressed by this policy, do not require additional permits and do not constitute a prohibited discharge. See 33 CFR 153.301, 40 CFR 300, RCW 90.56.320(1), WAC 173-201A-110, ORS 468b.305 (2)(b).

#### 4641.1 Criteria

During spill response operations, mechanical recovery of oil is often restricted by a number of factors, including the recovery system's oil/water recovery rate, the type of recovery system employed and the amount of tank space available on the recovery unit to hold recovered oil/water mixtures. In addition, the longer oil remains on or in the water, the more it mixes to form an emulsified mousse or highly mixed oil/water liquid, which sometimes contains as much as 70% water and 30% oil, thus consuming significantly more storage space. Decanting is the process of draining off recovered water from portable tanks, internal tanks, collection wells or other storage containers to increase the available storage capacity of recovered oil. When decanting is conducted properly most of the petroleum can be removed from the water.

The overriding goal of mechanical recovery is the expeditious recovery of oil from water. In many cases, the separation of oil and water and discharge of excess water is necessary for skimming operations to be effective in maximizing the amount of oil recovered and in minimizing overall environmental damages. Such actions should be considered and in appropriate circumstances authorized by the FOSC and/or SOSC

because the discharged water will be much less harmful to the environment than allowing the oil to remain on the water and be subject to spreading and weathering. During a response, it will likely be necessary for response contractors or a responsible party to request from the FOSC and/or SOSC authority to decant while recovering oil so that response operations do not cease or become impaired. Expeditious review and approval, as appropriate, of such requests is necessary to ensure a rapid and efficient recovery operation. In addition, such incidental discharges associated with mechanical recovery operations should not be considered prohibited discharges. Therefore, the Area Committee adopts this policy to provide for an expeditious approval process and provide guidance to OSCs, responsible parties, response contractors and other members of the spill response community relating to incidental discharges and decanting.

The Federal and State OSCs will consider each request for decanting on a case by case basis. Prior to approving decanting, the OSCs should evaluate the potential effects of weather including the wind and wave conditions, the quantity of oil spilled and the type of oil as well as available storage receptacles. The OSC should also take into account that recovery operations as enhanced by decanting will actually reduce the overall quantity of pollutants in a more timely and effective manner to facilitate cleanup operations. The following is the Oil Spill Decanting Authorization Form:

# Northwest Area Contingency Plan

	7.3.2 Oil Spill Decanting Authorization Form
ORS/OA	ral and state OSCs, under authority of RCW 90.56.320(1) and WAC 173-201A-110 (in Washington), or R (in Oregon), hereby approve the use of decanting as a means of expediting the recoverging the following spill cleanup operation:
Date(s) A	pproval Effective:
Name of	Spill Incident:
Federally	Defined Response Area:
Name of	Requester:
Location	and Description of Proposed Decanting Operation: (continue on reverse, if necessary)
The decar	nting operation must meet the following conditions:  All decanting should be done in a designated "Response Area" within a collection area, vessel collection well, recovery belt, weir area, or directly in front of a recovery system.
2.	Vessels employing sweep booms with recovery pumps in the apex of the boom shall decant forward of the recovery pumps.
3.	Vessels not equipped with an oil/water separator should allow retention time for oil held in internal or portable tanks before decanting commences.
4.	Containment boom must / need not (circle one) be deployed around the collection area to prevent loss of decanted oil or entrainment.
5.	Visual monitoring of the decanting shall be maintained at all times so that discharge of oil in the decanted water is detected promptly.
6.	Decanting in areas where vacuum trucks, portable tanks, or other collection systems are used for shore cleanup will be subject to the same rules as vessels.
7.	Additional conditions: (continue on reverse if necessary)
SIGNATU Federal O	
SIGNATU State OSC	
NOTE:	When verbal authorization is given, a copy of this form must be immediately expedited to the requester (must be a person of authority in the cleanup organization) to ensure that the conditions and limitations are clearly understood by all parties.

The following criteria should be considered by the FOSC and/or SOSC in determining whether to approve decanting unless circumstances dictate otherwise:

All decanting should be done in a designated "Response Area" within a collection area, vessel collection well, recovery belt, weir area, or directly in front of a recovery system.

Vessels employing sweep booms with recovery pumps in the apex of the boom should decant forward of the recovery pump.

All vessels, motor vehicles and other equipment not equipped with an oil/water separator should allow retention time for oil held in internal or portable tanks before decanting commences.

When deemed necessary by the FOSC and/or SOSC or the response contractor a containment boom will be deployed around the collection area to minimize loss of decanted oil or entrainment.

Visual monitoring of the decanting area shall be maintained so that discharge of oil in the decanted water is detected promptly.

Decanting in areas where vacuum trucks, portable tanks or other collection systems are used for shore cleanup will be subject to the same rules as vessels.

The response contractor or responsible party will seek approval from the FOSC and/or SOSC prior to decanting by presenting the Unified Command with a brief description of the area for which decanting approval is sought, the decanting process proposed, the prevailing conditions (wind, weather, etc.) and protective measures proposed to be implemented. The FOSC and/or SOSC will review such requests promptly and render a decision as quickly as possible. FOSC authorization is required in all cases and in addition SOSC authorization is required for decanting activities in state waters.

The FOSC and/or SOSC will review and provide directions and authorization as appropriate to requests to wash down vessels, facilities and equipment to facilitate response activities.

Other activities related to possible oil discharges associated with an oil spill event such as actions to save a vessel or protect human life which may include such actions as pumping bilges on a sinking vessel are not covered by this policy.

#### 4650 Bioremediation

The use of bioremediation in open water is an unproven technology that currently shows little or no promise of removing significant quantities of oil from the surface of the water prior to shoreline impact or natural dispersion. Bioremediation by nutrient enhancement or

seeding of biodegrading organisms is therefore not allowed on the surface of open water. This policy can be reviewed by the RRT if there is new and significant evidence that bioremediation can be a significant factor in oil removal on open water.

#### **Bioremediation of Shorlines**

Seeding of exotic organisms for pollution response is prohibited in Response Region Ten. This is due to unproven efficacy of such procedures and the unknown ecological effects resulting from the implementation of such.

Bioremediation is an effective technique for the encouragement of oil biodegradation on some contaminated shorelines. Nonetheless, this strategy is unlikely to lead to rapid decontamination of beaches. Consequently, bioremediation should be used as the primary treatment only when oil concentrations are low (less than 15 grams of oil for every kilogram of sediment) and conventional forms of cleanup (heavy equipment use or manual cleaning) are likely to do more damage than good. Bioremediation should be considered as a polishing technique after gross contamination is removed by conventional means.

The use of bioremediation for oil spill clean up will be allowed only on a case-by-case basis.

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